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EFFECTS OF DEFICIENT DIETARY INFORMATION, WITH A FOCUS ON THE WORKING CLASS OF INDIA

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ABSTRACT

Maintaining dietary equilibrium is essential for the well-being of individuals and future generations. However, a significant portion of the Indian population, specifically the working class, lack access to adequate dietary information and resources. This impedes their ability to maintain a balanced diet. This paper explores the importance of adequate nutrition, the dire ramifications of its absence, and possible solutions to this deficiency in nutrition. Using research techniques such as case studies and government data analysis, the paper investigates the current state of nutrition in India, particularly among the working class. It identifies cases of inadequate nutrition and food poisoning and their causes. The findings reveal that many Indians do not meet their daily nutritional requirements, with common deficiencies in vitamins B12 and D3, zinc, iron, calcium, folic acid, and Vitamin C. This inadequacy's root causes are traditional dietary practices, vegetarianism, and, most importantly, the lack of dietary education and information among the working class of India. These nutritional deficits contribute to health issues such as obesity, heart disease, strokes, type 2 diabetes, and various cancers. Furthermore, food poisoning poses a significant threat to one's health, causing numerous deaths annually. Several methods of improvement for this bleak situation were deduced, such as awareness campaigns, collaborations between healthcare practitioners and schools or community centers, and the distribution of educational pamphlets in local languages, making dietary information easily accessible to the masses.

KEYWORDS: Dietary Education, Working Class, Balanced Diet, Heart Disease, Obesity.

INTRODUCTION

Good nutrition and a balanced diet are essential to keeping the immediate and future generations healthy. In children, a healthy, informed diet is essential in ensuring proper physical development and reducing the risk of chronic diseases. In adults, having a stabilized diet results in a lower risk of conditions such as obesity and heart disease. Adequate nutrition is also helpful to people with chronic diseases, as it can manage these conditions and avoid complications. Often, people in the working class of India do not have access to a healthy diet and good nutrition, which can lead to several harmful effects such as obesity, heart disease and strokes, type 2 diabetes, and some cancers. According to a nationwide survey of 220 healthcare practitioners conducted by multivitamin supplement brand Supradyn, the common Indian dietary regimen fulfills roughly 70% or less of the nutritional needs of a person. Along with this, statistics point to an alarming 2 million deaths per year in India due to food poisoning. The data further states that all of these issues mainly occur in the lower working class of laborers who don't have access to the dietary information necessary to uphold healthy eating practices. A critical examination of the unfavorable impact of inadequate dietary information, particularly among the working class in India, highlights the urgent need for comprehensive nutritional education and policy interventions to improve the health and well-being of the masses.

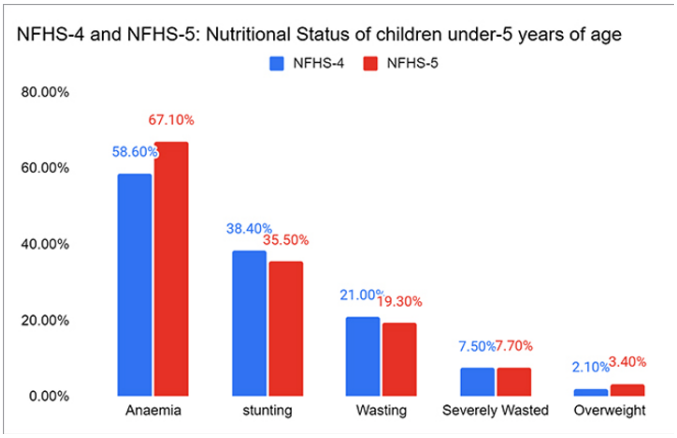
METHODOLOGY

This study adopts a quantitative approach to investigate the challenges of inadequate dietary information among the working class in India. Quantitative research involves analyzing numerical data to identify patterns and trends, providing objective insights into the prevalence of nutritional deficiencies and food poisoning incidents. Using a quantitative approach allows systematic analysis of large datasets, establishes cause-and-effect relationships, and generalizes findings to broader populations. This approach enables comprehensive analysis and evidence-based policymaking. Some shortcomings of this method of research are that quantitative methods may overlook contextual complexities, struggle to capture subjective experiences, and introduce response bias or measurement errors. While providing statistical insights, they may lack the depth of qualitative approaches to understanding cultural influences and individual motivations.

To truly comprehend how detrimental the dearth of nutritional information and meager nutrition is, analyzing each of the deleterious consequences in detail is necessary. Firstly, more than 135 million individuals are affected by obesity in India. According to the ICMR-INDIAB study (2015), the prevalence rate of obesity and central obesity varies from 11.8% to 31.3% and 16.9%-36.3% respectively. Furthermore, obesity raises the chances of having cardiovascular disease (CVDs) phenomenally (Ahirwar & Mondal, 2019). High blood pressure and high blood cholesterol are the main causes of heart diseases and strokes. Blood pressure is directly proportional to the amount of sodium one consumes, in turn, increasing the chances of having a heart disease or stroke. The main source of sodium is salt.

Guidelines provided by the WHO state that the recommended daily salt intake is 5 grams per day, while the daily salt intake in India is about 11 grams per day, over double the recommended amount (Johnson et al., 2019). People with obesity have an increased risk of type 2 diabetes because, as their bodies age, they become less able to utilize the insulin produced in their bodies. It was estimated that in 2019, 77 million individuals - roughly one in every 18 people - had diabetes in India. The data further highlights that this number is expected to rise to over 134 million by 2045. Furthermore, approximately 57% of these individuals remain undiagnosed (Pradeepa & Mohan, 2021). Consuming an unhealthy diet and combinations of edibles such as sugar-sweetened beverages and processed food can result in chronic conditions that put an individual at risk of at least 13 types of cancer, some of which are endometrial (uterine) cancer, breast cancer in postmenopausal women, and colorectal cancer. The risk of colorectal cancer is additionally associated with digesting red and processed meat. Breast cancer, along with lung cancer, is one of the leading sites of cancer in India (Sathishkumar et al., 2022).

Supradyn conducted a survey of 220 doctors and nutritionists across India inquiring about their thoughts on the traditional Indian culinary traditions, and an astonishing 90% of them stated that conventional Indian eating habits fulfill roughly 70% of the daily nutritional needs of a person, if not less. They also agreed that there is at least a 30% nutritional gap in the average daily diet, even among those who consume non-vegetarian cuisine. Moreover, the survey results state that vitamin B12 and D3 are the top two vitamins lacking in the Indian nutritional norms, followed by zinc, iron, calcium, folic acid, and vitamin C. The survey goes on to highlight that 73% of the doctors participating in it believe that this inadequacy could be overcome with a daily dose of multivitamin-multimineral supplements or simple tweaking of the diet (Average Indian diet, 2021).



Food poisoning is rising at an alarming rate in India. The harmful foods, while causing negative short-term effects, create a vicious cycle of foodborne diseases that may take a person's life. An estimated 2 million deaths occur in India annually due to the consumption of contaminated food and water. According to a report published by the WHO in May 2022, over 500,000 people die globally on average, due to consumption of unhealthy food. Further analysis suggests children under 5 years of age are most affected. In India, households, often of the working class, have a daunting 13.2% chance of upholding unhealthy eating practices. Many Indian states, a subset of which are Telangana, Kerala, and Madhya Pradesh, have been headlined in the news due to civilian casualties from hazardous food practices. In Telangana, at a government girls' high school in Siddipet, 120 students fell sick after consuming an unhealthy meal. They were taken to a government hospital and were still receiving treatment in early July 2022. In Kerala, a 16-year-old's life was lost due to the consumption of chicken shawarma at a local eatery named "Ideal Food Point"' in Kasargod. In Madhya Pradesh, over 95 children became sick after digesting "Pani Puri"' at a fair in Madla, and suffered from stomach pain and vomiting (Singh, 2022).

Discussing the most common nutritional deficiencies among the masses in India gives clear insight into the roots of the entire bleak situation and allows solutions to be a lot more comprehensible. The majority of people in India have a vitamin D deficiency; this vitamin is essential for maintaining the well-being of our teeth and bones. In common Indian food consumption patterns, only a few of the foods contain vitamin D, and that too in insufficient quantities. The daily recommended amount of vitamin D is 400-600 IU (international unit) and 700-800 IU for people over 70 years of age. Vitamin B12 is a perfect example of upheld traditions resulting in insufficient nutrition in one's diet. A large percentage of the population of India is vegetarian, and hence is missing out on vitamin B12 almost entirely. This is enormously perilous as vitamin B12 is essential for healthy nerve tissue, brain functions, and red blood cell production. The recommended daily intake for vitamin B12 is 2.4 micrograms.

Iron deficiency is common not only in India, but all across the globe. Iron is important as it is responsible for the formation of hemoglobin, and its deficiency leads to paleness and weakness (Most Common Nutrient Deficiencies, 2020). All of these nutrients are crucial, and despite many Indians having insufficient amounts of them, small changes to one's eating habits can fix these issues.

RESULTS

Quantitative analysis revealed the significant prevalence of nutritional deficiencies among the working-class population in India. Findings indicate high rates of inadequate intake of essential vitamins and minerals, including vitamin B12, vitamin D3, zinc, iron, calcium, folic acid, and vitamin C. Moreover, the incidence of food poisoning incidents was alarmingly high, contributing to adverse health outcomes and mortality rates among the targeted demographic.

DISCUSSION

The results emphasize the critical need for comprehensive interventions to tackle the issue of inadequate dietary information among India's working class. They reveal a complex interplay of socio-economic, cultural, and environmental factors contributing to nutritional deficiencies and foodborne illnesses. Effective policy initiatives should prioritize improving access to nutritional education, promoting healthy eating habits, and enhancing food safety measures. Collaborative efforts

involving government agencies, healthcare practitioners, educational institutions, and community organizations are essential to effectively addressing these challenges. Future research should continue exploring innovative approaches to enhance nutritional literacy, empower individuals to make informed dietary choices and improve overall health outcomes among vulnerable populations.

CONCLUSION

In conclusion, while typical Indian dietary patterns have been upheld in many households due to religion and tradition, they lack in many facets from a nutritional perspective. These nutritional deficiencies can have major repercussions and should be paid attention to by the educated masses. Spreading education and nutritional evidence to the working class of India, among whom these issues are most dominant, will impact the general health and well-being of the people massively and should be taken more seriously by both the government and the upper-class people who have easy access to this information. Some of the ways this can be done are through government-funded awareness campaigns, collaborations with healthcare practitioners in schools and community centers, the utilization of multimedia such as television to endorse healthy eating habits, and the creation of pamphlets and booklets containing dietary information, in local languages, which could be distributed in schools, workplaces, and community centers.

REFERENCES

1. Ahirwar, R., & Mondal, P. R. (2019). Prevalence of obesity in India: A systematic review. Diabetes & metabolic syndrome, 13(1), 318–321. https://doi.org/10.1016/j.dsx.2018.08.032
2. Johnson, C., Santos, J. A., Sparks, E., Raj, T. S., Mohan, S., Garg, V., Rogers, K., Maulik, P. K., Prabhakaran, D., Neal, B., & Webster, J. (2019). Sources of Dietary Salt in North and South India Estimated from 24 Hour Dietary Recall. Nutrients, 11(2), 318. https://doi.org/10.3390/nu11020318
3. Pradeepa, R., & Mohan, V. (2021). Epidemiology of type 2 diabetes in India. Indian journal of ophthalmology, 69(11), 2932–2938. https://doi.org/10.4103/ijo.IJO_1627_21
4. Sathishkumar, K., Chaturvedi, M., Das, P., Stephen, S., & Mathur, P. (2022). Cancer incidence estimates for 2022 & projection for 2025: Result from National Cancer Registry Programme, India. The Indian journal of medical research, 156(4&5), 598–607. https://doi.org/10.4103/ijmr.ijmr_1821_224
5. Anonymous (2021). Average Indian diet has insufficient nutrition: Study. Times of India. https://timesofindia.indiatimes.com/life-style/food-news/average-indian-diet-has-insufficient-nutrition-study/articleshow/86010578.cms
6. Singh, R. K. (2022). Alarming! increasing food poisoning cases in India makes food safety a public health priority. The Logical Indian. https://thelogicalindian.com/health/increasing-food-poisoning-cases-in-india-makes-food-safety-a-priority-36285?infinitescroll=1
7. Anonymous (2020). Most common nutrient deficiencies among Indians. The Times of India. https://timesofindia.indiatimes.com/life-style/health-fitness/diet/most-common-nutrient-deficiencies-among-indians/photostory/78366357.cms